REMARKS

Status of the claims:

The following remarks are submitted in response to the Office Action mailed August 28, 2007.

Prior to entry of the above amendments, claims 1-12, 16-33, 38, 40, and 47-63 are pending in the present application.

Claims 47-63 were withdrawn from consideration by the Examiner as being drawn to a non-elected invention, and Applicants have canceled claims 47-63 without prejudice to their re-entry in a separate application.

Claim 31 stands rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Claims 21 and 23 stand rejected under 36 U.S.C. § 112, second paragraph, as being indefinite.

Claims 1-12, 16-33, 38 and 40 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting.

Claims 1, 3, 5-7, 10, 11, 16, 21, 24, 26, 32, 33, 38, and 40 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Drefahl et al. {CA 61:651c-h, 1964).

Claims 1-5, 7-12, 16, 19, 22, 24-33, 38, and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Heerding et al. (WO 2000/71120).

Scope of Examination

In the Office Action mailed August 28, 2007, the Examiner searched subject matter with the following substitutions on Formula (I) in claim 1: W is $N(R_2)$; Ar_1 is an optionally substituted phenyl group; Ar_2 is an optionally substituted phenyl group; T is an optionally substituted phenyl group; L_2 is a direct bond; and all other variables are as defined.

Claim Amendments

With the above amendments, claims 1, 2, 20, 21, and 23 have been amended. No new matter has been added by way of the above amendments.

With the amendment to R_2 in claim 1, R_2 no longer includes hydrogen as a group. With the amendment to L_3 canceling "direct bond", D can no longer be directly connected to the nitrogen of W. Amendments to dependent claims 2, 20, 21, and 23 are to place the claims within the scope of claim 1.

Rejections under 35 U.S.C. §112, first paragraph

Claim 31 is rejected under 35 U.S.C. § 112, first paragraph as allegedly not being enabled.

Applicants traverse.

Contrary to the Examiner's statement, Applicants submit that with regard to claim 31 a composition can be made and used without undue experimentation that contains one or more of alkylating agents, antimetabolites, plant alkaloids, antibiotics, hormones, biologic response modifiers, analgesics, NSAIDs, DMARDs, glucocorticoids, sulfonylureas, biguanides, acarbose, PPAR agonists, DPP-IV inhibitors, GK activators, insulin, insulin mimetics, insulin secretagogues, insulin sensitizers, GLP-1, GLP-1 mimetics, cholinesterase inhibitors, antipsychotics, antidepressants, anticonvulsants, HMG CoA reductase inhibitors, cholestyramine, or fibrates.

Examples of many of these therapeutic agents are listed on pages 324-325. For those therapeutic agents that do not have specific examples on pages 324-325 or that the Examiner has stated are not enabled in combination with the compound of Formula (I), Applicants submit that one skilled in the art at the time of filing would not need any guidance as to the breadth of these particular types of therapeutic agents or how to identify these types of therapeutic agents. *In re Howarth*, 654 F.2d 103, 105, 210 USPQ 689, 691 (CCPA 1981) ("An inventor need not . . . explain every detail since he is speaking to those skilled in the art. What is conventional knowledge will be read into the disclosure. Accordingly, an applicant's duty to tell all that is necessary to make or use varies greatly depending upon the art to which the invention pertains.")

For example DPP-IV inhibitors refers to dipeptidyl-peptidase-IV inhibitors. Examples of DPP-IV inhibitors include, but are not limited to, vildagliptin (Galvus™) and sitagliptin (Januvia™). Publication WO 95/15309 discloses certain peptide derivatives that are DDP-IV inhibitors. Publication WO 98/19998 also discloses certain N-substituted-2-cyanopyrrolidines that are DPP-IV inhibitors. The Examiner is reminded that a patent need not teach, and preferably omits, what is well known in the art. See *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991); *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), cert. denied, 480 U.S. 947 (1987); and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1463, 221 USPQ 481, 489 (Fed. Cir. 1984). As was discussed above, DPP-IV inhibitors are well known in the art. Likewise, alkylating agents, antimetabolites, plant alkaloids, antibiotics, hormones, biologic response modifiers, analgesics, NSAIDs, DMARDs, glucocorticoids, sulfonylureas, biguanides, acarbose, PPAR agonists, GK activators, insulin, insulin mimetics, insulin secretagogues, insulin sensitizers, GLP-1, GLP-1 mimetics, cholinesterase inhibitors, antipsychotics, antidepressants, anticonvulsants, HMG CoA reductase inhibitors, cholestyramine, and fibrates are well known in the art.

For example, fibrates refers to fibric acid derivatives such as clofibrate, fenofibrate, bezafibrate, ciprofibrate, beclofibrate and etofibrate. See US Patent Pub. 20020037911 published March 28, 2002.

Glucokinase activators refers to compounds that activate glucokinase. Glucokinase activators are useful for increasing insulin secretion in the treatment of type II diabetes. Examples of glucokinase activators include, but are not limited to, compounds found in US Patent No. 6,320,050 (US Patent Pub. No. 20010039344 published November 8, 2001).

GLP-1 (glucagon-like peptide-1) mimetics refers to peptides having a sequence that is substantially homologous to that of a naturally occurring GLP-1 peptide and may contain one or more additional amino acids at their amino and/or their carboxy termini. Examples of GLP-1 mimetics includes, but are not limited to, compounds found in US Patent No. 5,614,492.

Thus, all of the above enumerated classes of compounds are well known in the art.

With regard to the level of experimentation needed to make the combinations recited in claim 31, Applicants submit that the components enumerated in claim 31 could be combined with the compounds of the present invention to make a composition without undue experimentation. The techniques involved in preparing a pharmaceutical formulation recited in claim 31 were well known in the art even before the filing date and can be readily practiced by one of ordinary skill in the art. See for example, Remington: The Science and Practice of Pharmacy 1995, edited by E. W. Martin, Mack Publishing Company, 19th edition, Easton, Pa for a description of how to prepare various compositions. As stated by the Examiner, the level of skill of one of ordinary skill in the pharmaceutical art is very high.

With regard to the Examiner's statement that "one needs to take into account drug-drug interactions" when preparing pharmaceutical compositions containing multiple active ingredients, the Examiner admits that *Obach* discloses "a number of *in vitro* and *in vivo* experimental approaches to be taken to determine possible drug-drug interactions." Relying on *Obach*, one skilled in the art would be able to determine possible drug-drug interactions. Thus, a claim such as claim 31 is not broader than the enabling disclosure even if, for the sake of argument, it reads on a very large number of inoperative embodiments because "a person skilled in the relevant art could determine which conceived but not-yet-fabricated embodiments would be inoperative with expenditure of no more effort than is normally required" in the art. *In re Cook*, 439 F.2d 730, 169 USPQ 298, 302 (CCPA 1971).

Further, for the sake of argument, assuming that it is possible that there may be inoperable combinations in claim 31 due to drug-drug interactions, the existence of a few inoperable embodiments does not render claim 31 non-enabled. Even if some of the claimed combinations were inoperative, "it is not a function of the claims to specifically exclude . . . possible inoperative substances . . . ." *In re Dinh-Nguyen*, 492 F.2d 856, 859, 181 USPQ 46, 48 (CCPA 1974)(emphasis omitted). Accord, *In re Geerdes*, 491 F.2d 1260, 1265, 180 USPQ 789, 793 (CCPA 1974); *In re Anderson*, 471 F.2d 1237, 1242, 176 USPQ 331, 334-335 (CCPA 1971) (The claims "are inherently limited -- by common

sense if nothing else -- to such medication as would be useful in the particular application."). Of course, if the number of inoperative combinations becomes significant, and in effect forces one of ordinary skill in the art to experiment unduly in order to practice the claimed invention, the claims might be invalid. See e.g., *In re Cook*, at 302.

Moreover, Applicants respectfully direct the Examiner's attention to *In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988) wherein the court found the claims were enabled even though there were inoperable embodiments that were claimed. The court found all of the methods needed to practice the invention were well known, and that there was a high level of skill in the art at the time the application was filed. Similarly, without acquiescing to a position that any of the claimed compositions are inoperable, all of the methods needed to practice the claimed invention are known and there is also a high level of skill in the pharmaceutical composition art. Accordingly, the present case is also enabled for the full scope of the claimed invention.

For the above reasons, Applicants submit that the enablement rejection is inapposite.

Withdrawal of the rejection is warranted and respectfully requested.

Rejections under 35 U.S.C. §112, first paragraph

Claims 21 and 23 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite.

Claims 21 and 23 have been amended to fall within the scope of claim 1. Accordingly, Applicants believe that the rejected claims can no longer be considered vague or indefinite.

Withdrawal of the rejection is warranted and respectfully requested.

Double Patenting

Claims 1-12, 16-33, 38 and 40 have been provisionally rejected under judicially created obviousness type double patenting as being unpatentable over claims 1-16, 19-26, 28-52 and 70 of co-pending Application No. 11/056,498.

Applicants traverse.

MPEP 804 recites:

If a "provisional" nonstatutory obviousness-type double patenting (ODP) rejection is the only rejection remaining in the earlier filed of the two pending applications, while the later-filed application is rejectable on other grounds, the examiner should withdraw that rejection and permit the earlier-filed application to issue as a patent without a terminal disclaimer. If the ODP rejection is the only rejection remaining in the later-filed application, while the earlier-filed application is rejectable on other grounds, a terminal disclaimer must be required in the later-filed application before the rejection can be withdrawn.

In accordance with the above passage, should all rejections (besides the obviousness type double patenting rejection) be obviated in the present application, Applicants respectfully request that the Examiner allow the present application to issue while withdrawing the provisional obviousness type double patenting rejection. In this regard, Applicants respectfully submit that the instant application has a filing date that precedes that of co-pending Application No. 11/056,498 (i.e., February 12, 2004 v. February 11, 2005, respectively). Thus, in accordance with the above recited quotation from the MPEP, the Examiner should allow the present application to issue.

Rejections under 35 U.S.C. § 102

Claims 1, 3, 5-7, 10, 11, 16, 21, 24, 26, 32, 33, 38, and 40 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Drefahl et al. {CA 61:651c-h, 1964).

Applicants traverse.

Applicants have amended claim 1 so that none of the cited compounds in *Drefahl* fit within the genus of the present invention. Specifically, R_2 in claim 1 does not include any compounds where a phenyl group is directly connected to the nitrogen of W.

All other claims are either directly or indirectly dependent from claim 1. Applicants believe that with this amendment to claim 1 that the rejection has been obviated.

Withdrawal of the rejection is warranted and respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 1-5, 7-12, 16, 19, 22, 24-33, 38, and 40 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Heerding et al. (WO 2000/71120).

Applicants traverse.

To establish a proper case of obviousness, one must apply the Graham v. John Deere factors. These factors include:

(A) Determining the scope and contents of the prior art;

(B) Ascertaining the differences between the prior art and the claims in issue;

(C) Resolving the level of ordinary skill in the pertinent art; and

(D) Evaluating evidence of secondary considerations.

See Graham v. John Deere, 383 U.S. 1, 148 USPQ 459 (1966).

Moreover, recently in the KSR case, regarding obviousness, the Court held

Often, it will be necessary . . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. See In re Kahn, 441 F. 3d 977, 988 (CA Fed. 2006) ([R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness).

See *KSR International Co. V. Teleflex Inc. et al.* (Bench Opinion No. 04-1350.)

When the John Deere factors and the holding in KSR are considered in light of the rejection presented, one can only conclude the instantly claimed invention is non-obvious for the following reasons.

Claim 1 has been amended so that there is no overlap between the instantly claimed genus and the genus disclosed in *Heerding*. For example, the genus of Formula (II) in *Heerding* requires that a proton be present at the 1 position of the imidazole. In contrast, the compound of Formula (I) in claim 1 of the present application, does not include any compounds having a proton at the 1 position of the imidazole. Further, *Heerding* fails to disclose or remotely suggest for Formula (II) any other group besides a proton the 1 position. Formula (I) in *Heerding* by contrast does not disclose or suggest any substituent other than a proton at the 2 position of the imidazole ring. There is no overlap between the instantly claimed invention and Formula (I) also. Accordingly,

because there is no overlap between the genus of the present invention and the genus in *Heerding* and there is no suggestion to modify *Heeding* in such a way, Applicants submit that *Heerding* can not render the present invention *prima facie* obvious.

Withdrawal of the rejection is warranted and respectfully requested.

Fees

The Office Action mailed August 28, 2007, set a shortened statutory period of three months for a reply. This Response is being filed before November 28, 2007, thus no extension fee is necessary.

The appropriate fee associated with the enclosed IDS is submitted.

No additional fee is believed due, however, should a fee be deemed to be necessary, the Commissioner is hereby authorized to charge any fees required by this action or any future action to Deposit Account No. 16-1435.

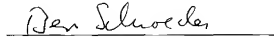
CONCLUSION

With the above amendments and remarks, Applicants believe that all objections and/or rejections have been obviated. Thus, each of the claims remaining in the application is in condition for immediate allowance. Passage of the instant invention to allowance is earnestly solicited.

Should the Examiner have any questions relating to the instant application, the Examiner is invited to telephone the undersigned at (336) 607-7486 to discuss any issues.

Respectfully submitted,

Date: October 12, 2007



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